Patent Drawing Tabulation Sheet

10- pneumatic dent puller

12- pneumatic hammer

14- handle

16- trigger

18- air hose fitting

20- air hose

22- housing

24- nose end

26- aperture for nose

28- threaded member

30- dented surface portion 29

32- panel of 30

34- hole formed in 30

Patent Drawing Tabulation

36-	u-shaped tool	2B
38-	structure	2B
40-	right-angled tool	2C
42-	boxed structure	2C
44-	base for 36	
46-	base for 40	
48-	stud for 36 & 40	
50-	slider switch	
52-		
54-		
56-		
58-		

8-18-00 S4B

PRE-DEVELOPMENT QUESTIONNAIRE

AUG 17 2000

The following information request will be needed for the creation of all of the written materials for your project. Please return this information to us as soon as possible. Consult your Inventors Manual for more information and direction. ***PLEASE COMPLETE ALL QUESTIONS.***

Be careful to write names, etc. exactly as you want them to appear on all official documents.

(PLEASE PRINT CLEARLY)

NAME Justin (FIRST) Wade (MIDDLE) Snowden (LAST)

CO-INVENTOR† _____ (FIRST) _____ (MIDDLE) _____ (LAST)

❖Only fill in if this is a true co-inventor, who had a hand in inventing the product and whose name should appear on the patent application.

ADDRESS _____ (APT. OR HOUSE #) (STREET)

_____ (CITY) _____ (STATE) _____ (ZIP CODE)

Home Phone:( )_____-_____ Work Phone:( )_____-_____

PRODUCT NAME _____

❖❖❖All items marked with an asterisk (*) ARE OPTIONAL. This information is needed if you choose to participate in the Press Release part of the program. ***If you wish to decline the Press Release program at this time, please initial here:*** JS

MARITAL STATUS* _____

SPOUSE'S NAME * _____ (FIRST) (MIDDLE) (LAST)

CHILDREN* _____

GRANDCHILDREN* _____

EMPLOYER'S NAME* _____ POSITION* _____

YOUR HOBBIES AND INTERESTS:* _____

_____

THE STORY BEHIND YOUR INVENTION/ OTHER PERTINENT INFORMATION THAT MAY BE HELPFUL IN PROMOTING YOUR IDEA (Attach additional sheets if necessary).

On back of this sheet

The following information is VITAL to the preparation of most of the items associated with your project, including your *Patent Application*. Please provide as much detail as possible. Refer to the Inventors Manual section entitled, "PRE-DEVELOPMENT QUESTIONNAIRE." ATTACH EXTRA SHEETS IF NECESSARY.

1. Sketch how your invention looks in detail. If you have a drawing or photograph, please attach it and label and name each part. State the function of each part and how it works.

Note: If an illustration was done for you by us, please check which of the following apply:

- ☐ Illustration is fine as-is. I have attached a copy of it.
- ☑ I have attached a copy of it and indicated all necessary changes.
- ☐ Refer to my sketch (below, or attached) and provide completely new drawings.

2. From start to finish, state exactly how your invention is used (as if you are writing an instruction booklet to accompany the product.) First, make a hole in the dented area of the panel using a drill or scratch awl. Then, thread the screw end of the puller into the hole. With an air hose attached, pull the trigger of the tool, while applying pressure to the handle. When the dent is pulled, remove the tool, grind the paint from the dented area and finish with desired body filler.

3. In comparison to products that are currently patented or used to perform this task or fill this need that you know of, how is your invention different, better and unique? Make direct comparisons of the advantages your invention has over the others. A traditional dent puller has a heavy weight or "slide hammer. This weight requires quite a large amount of energy be exerted upon it by the technician pulling the dent.

A pneumatic puller would be a new relatively light-weight solution to this problem. The air hammer would greatly decrease the amount of physical energy needed to perform the same task.

The vibration of an air hammer is considerably less abrupt than the slapping action of a slide hammer and, would therefore, greatly reduce upon hands and arms.

In addition, there would be no bruises or skinned knuckles from fingers being in the wrong place at the wrong time.

Slide hammers are a dinosaur in the autobody field, and it's time for a change in acient methods.

4. **Name any other use(s) for or benefit(s) of your invention:**

Mechanics use slide hammers for pulling bearings, and harmonic balancers. with the right attachments, the pneumatic puller could be just as useful for mechanics as for autobody. This has the potential to become a vital tool throughout the automotive repair industry.

5. **What else can you disclose about your invention?**

This information was written on the 13 **th day in the month of** August **in the year** 2000 **by :**

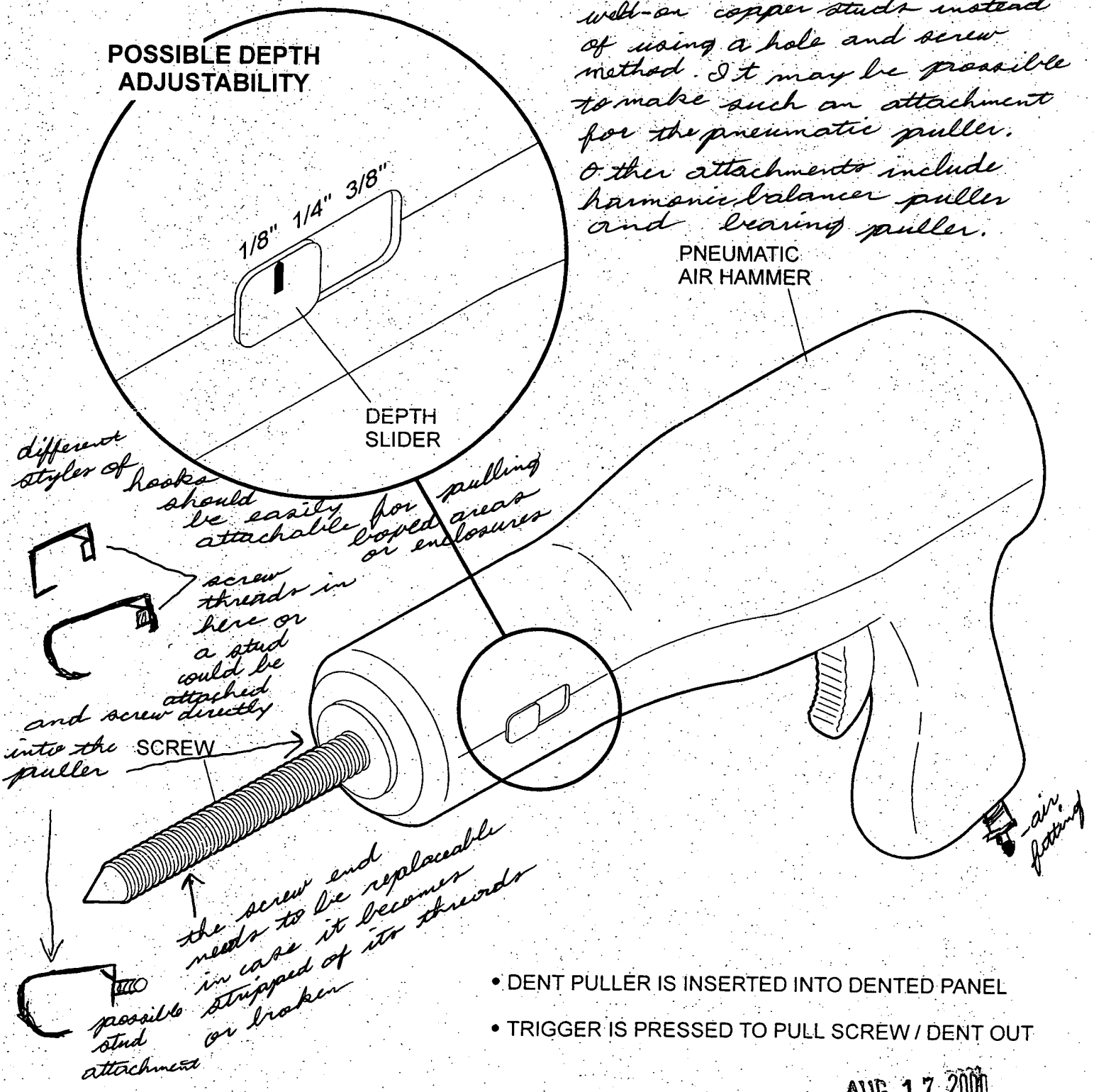
Sign Name: Justin Snowden

Print Name: Justin Snowden

AIR POWERED DENT PULLER

all attachments for traditional slide hammers should be considered.

some dent pullers attach to weld-on copper studs instead of using a hole and screw method. It may be possible to make such an attachment for the pneumatic puller. Other attachments include harmonic balancer puller and bearing puller.



- DENT PULLER IS INSERTED INTO DENTED PANEL
- TRIGGER IS PRESSED TO PULL SCREW / DENT OUT

AUG 17 2000

JUSTIN W. SNOWDEN
5/31/00 SG

PTO/SB/95 (06-1999)
Approved for use through 5/31/2002. OMB 0651-0030
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

DISCLOSURE DOCUMENT DEPOSIT REQUEST

Mail to:

Box DD
Assistant Commissioner for Patents
Washington, DC 20231

Inventor(s): Justin Snowden

Title of Invention: Air powered dent puller

The undersigned, being a named inventor of the disclosed invention, requests that the enclosed papers be accepted under the Disclosure Document Program, and that they be preserved for a period of two (2) years.

Justin Snowden
Signature of Inventor(s)

Justin Snowden
Typed or printed name

3-26-00
Date

3181 HWY 16
Address

Pang burn, AR, 72121
City, State, Zip

**(For Office Use Only) Enclosed is a Disclosure of the above-titled invention consisting of _____ sheets of description and _____ sheets of drawings. A check in the amount of $_____ is enclosed to cover the fee (37 CFR 1.21 (c)).

DISCLOSURE DOCUMENT NO.

523153

RETAINED FOR 2 YEARS
THIS IS NOT A PATENT APPLICATION

PTO-1652 (8/99)

INVENTOR'S QUESTIONNAIRE

Please fill out this questionnaire to your best ability. Some of the information requested may appear to be redundant, but it does allow our Staff to provide you with clear, concise information. Consult your representative for any assistance or guidance.

---

1. How would you like your name to appear on all written materials?

Justin Wade Snowden

2. If you have a co-inventor or co-inventors, do you want their name to appear on all materials? ___Yes X No. If so how do you want their name to appear?

---

3. How would you like the Invention Name to appear on all written materials?

Pneumatic dent-puller

4. Describe your Invention/Idea in as much detail as possible:

(Please attach additional paper to this form if necessary)

Page attached

5. Provide instructions as to how someone would use your Invention/Idea:

the technician makes a hole in the dented panel with a drill or punch. The threaded end of the puller is then screwed in the hole. The technician then pulls the trigger of the puller & applies pressure to the handle pulling the dent with minimal effort & time being spent

6. List all of the benefits and/or advantages that your Invention/Idea has:

Increased productivity, shortens work time, decrease in physical effort, lessens chance of hand injury

(Over)

7. **Does your Invention/Idea solve a particular problem? If so, how does it solve this problem?**

It saves time & increases productivity

8. **Do you have any suggestions as to the materials necessary to manufacture your Invention/Idea? If so, what would you recommend?**

No

9. **What do you think the retail price of your Invention/Idea would be?**

$ 100 - 150

10. **What stores, outlets or distributors would carry your Invention/Idea?**

Snap-on Tools, MATCO Tools, Crow-Burlingame, Wal-mart, KarPro

11. **What products, if any, would compete with your Invention/Idea? What are their retail prices?**

traditional slide hammer

12. **Who do you feel would buy your Invention/Idea?**

Autobody technicians (especially total rebuilders), mechanics

13. **Add any additional comments here:**

Manual slide hammers sometimes come with 90° or curved hooks on the end instead of the screw for pulling radiator supports & other boxed braces or panel edges

***If the drawing that you provided us with on the Official Record of Invention is not a detailed drawing, please attach a detailed drawing to this form. Please, if appropriate, label each part.

#42007 TB.

FEB 26 2000

The Law Office of David P. Gaudio, P.C.

THE INVENTORS NETWORK
800 Old Pond Road Suite 702 Bridgeville, PA 15017
toll-free phone: 1-888-477-9773 toll-free fax: 1-888-486-9788

INVENTOR'S OFFICIAL RECORD OF INVENTION

INVENTOR NAME Justin Wade Snowden
(FIRST) (MIDDLE) (LAST)

ADDRESS 3181 HWY 16

CITY Pangburn STATE AR ZIP CODE 72121

TELEPHONE: RESIDENCE (501) 728-4071

BUSINESS ( )

IDEAL CONTACT TIME: M-F 2-5 pm

CO-INVENTOR NAME:
(FIRST) (MIDDLE) (LAST)

Let it be known to all that I have conceived the product/idea illustrated and described herein which is called:

Air powered dent-puller
(PRODUCT/IDEA NAME)

The Inventors Network, its employees and representatives, hereby guarantee, without exception, that your new product/idea disclosed herein shall not be used, sold, assigned, or disclosed to any corporation, organization, or person without your prior written permission. This agreement is fully binding.

The undersigned (David P. Gaudio) hereby promises to keep this information confidential as per the canons of ethics and rules of professional conduct. Confidence refers to information protected by the attorney-client or agent-client privilege under applicable law.

David P. Gaudio
Attorney David P. Gaudio
Pennsylvania I.D. #77010

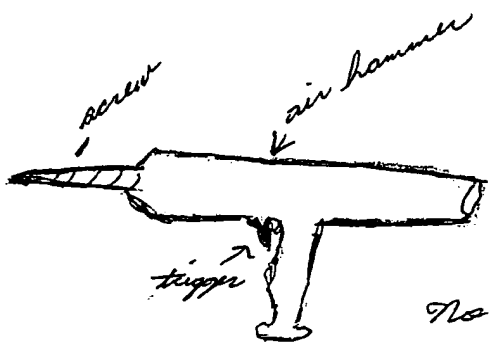
INVENTOR(S) SIGNATURE(S) Justin Snowden (DATE) 2-18-00

Revised 8-18-98

Notice: **PROHIBITED INVENTIONS:**
The following are categories of ideas or inventions that are <u>not</u> acceptable for research and development by The Inventors Network: *1.Perpetual motion device or machine* (any invention that can run indefinitely without re-generating the energy source.) *2. Products or ideas using the name, likeness, or logo of an individual group or corporation* (i.e. a "Batman" doll). *3.Chemical formulas or medications 4.Product ideas without component design, or based on an unrealistic level of technology* (i.e. ideas that have no plans as to how it should actually work). *5. Pornographic devices or products, or those considered harmful or in poor taste. 6.Military weapons. 7.Ideas not related to products* such as:*a. Business franchises.*b. Services to consumers, business, or government. *c. Advertising slogans or campaigns. *d. Literary or musical works.*e. Suggested public policies. For all items marked with an asterisk(*), we can help you with trademark or copyright protection for these types of ideas, but cannot assist in the marketing of them.

ILLUSTRATION

Please furnish a drawing of your product idea in the space provided. A professional illustration is not necessary nor expected. If photographs are available, please attach.



The screw is attached through a hole drilled in the dented panel (as on a traditional slide hammer) the technician simply pulls the trigger, applying slight pulling force on the handle at the same time, the air hammer does the rest. No smashed fingers and a large reduction in effort are just some of the benefits.

I had also thought of somehow regulating the pull distance according to the depth of the dent. Each pull could somehow be set at 1/4" or 1/8" and so on. I don't know how to make this reality. It was just an idea.

Please list suggested components and materials, etc.:

_____

_____

_____

DO NOT SUBMIT PROTOTYPES OR WORKING MODELS UNLESS REQUESTED. THE INVENTORS NETWORK IS NOT RESPONSIBLE FOR THE SAFE ARRIVAL, HANDLING, MANAGING OR RETURN OF ANY PROTOTYPES MAILED TO OUR ATTENTION UNLESS REQUESTED BY THE INVENTORS NETWORK.

PRODUCT/IDEA DESCRIPTION

Describe your product/idea.

Attaches to dented panel by screw. Rod is pulled back by Air powered hammer.

Explain the product/idea's function(s).

Operates as a slide-hammer body tool with minimuma effort.

List the product/idea's benefits and unique qualities.

reduced effort / increased productivity. lessen chance of injured hands

If this is an improvement on an existing product, list the new benefit(s).

BACKGROUND INFORMATION

When did you conceive your product/idea? Feb/5/00

Briefly state how you first conceived this idea (work, hobby, etc.). needed product at work

List those individuals to whom you have revealed your product/idea.

Jimmy Martin

Have you constructed a prototype? yes/crude Has it been tested/used? yes

PATENT STATUS

	YES	NO
Has a patent search been conducted? If yes, please attach.	☐	☒
Have you filed a patent application on your product/idea?	☐	☒
Do you have an issued Patent on your product/idea? If yes, please indicate date of issue or attach a copy	☐	☒
Have you made a public disclosure of your invention or offered it for sale?	☐	☒

If yes, please explain: _____

AREAS OF SPECIAL INTEREST

Please check areas of interest or need.

☒ Patent Development	☒ License Negotiation	☒ Distribution
☒ Prototype Development	☒ Manufacturing Contacts	☒ Graphic Arts

ADDITIONAL INFORMATION

Please include any additional information you feel may help us in understanding your product/idea.

_____

_____

_____

_____

_____

_____

Description

The puller is like a traditional slide hammer with a pneumatic hammer instead of the old slide weight. An air hammer with a handle underneath has a thread screw on one end. The air hammer applies pressure in the opposite direction of the screw end when the trigger on the handle is pulled. Essentially it is a regular slide hammer with a common air hammer working in reverse. Studying the make up of the two should help considerably with the design. The screw on the end should be removable in case of breakage or to use other attachments.